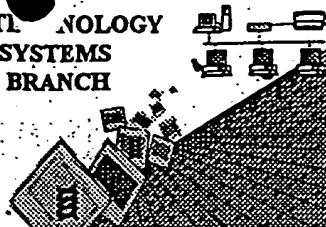


J. Roark

BIOTECHNOLOGY
SYSTEMS
BRANCH



#12

RAW SEQUENCE LISTING ERROR REPORT

RUSH

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/728,421 C
Source: OIPE
Date Processed by STIC: 6-3-02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

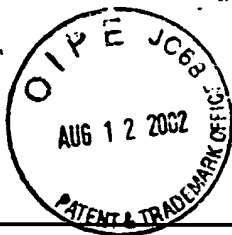
Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 091/728,421 C

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
 Wrapped Aminos was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will
 prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers;
 Numbering use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please
 ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules,
 each n or Xaa can only represent a single residue. Please present the maximum number of each
 residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0 A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
 "bug" sequences(s) . Normally, PatentIn would automatically generate this section from the
 previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
 the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for
 Artificial or Unknown sequences.
- 7 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (OLD RULES) (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 (NEW RULES) <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
 (NEW RULES) Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213> Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
 Response scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or
 is Artificial Sequence
- 11 Use of <220> Sequence(s) 5 missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or
 "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0 Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
 "bug" resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
 listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.



Does Not Comply
Corrected Diskette Needed



OIPE

RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/728,421C

TIME: 13:09:04

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

3 <110> APPLICANT: Yoshinaga, Steven
 5 <120> TITLE OF INVENTION: Novel Polypeptides Involved in Immune Response
 7 <130> FILE REFERENCE: A-579D
 9 <140> CURRENT APPLICATION NUMBER: 09/728,421C
 C--> 10 <141> CURRENT FILING DATE: 2002-05-17
 12 <150> PRIOR APPLICATION NUMBER: PCT/US00/01871
 13 <151> PRIOR FILING DATE: 2000-01-27
 15 <150> PRIOR APPLICATION NUMBER: US 09/264,527
 16 <151> PRIOR FILING DATE: 1999-03-08
 18 <150> PRIOR APPLICATION NUMBER: US 09/244,448
 19 <151> PRIOR FILING DATE: 1999-02-03
 21 <160> NUMBER OF SEQ ID NOS: 35
 23 <170> SOFTWARE: PatentIn version 3.0
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 600
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Mus musculus
 30 <220> FEATURE:
 31 <221> NAME/KEY: CDS
 32 <222> LOCATION: (1)..(600)
 34 <400> SEQUENCE: 1
 35 atg aag ccg tac ttc tgc cgt gtc ttt gtc ttc tgc ttc cta atc aga 48
 36 Met Lys Pro Tyr Phe Cys Arg Val Phe Val Phe Cys Phe Leu Ile Arg
 37 1 5 10 15
 39 ctt tta aca gga gaa atc aat ggc tgc gcc gat cat agg atg ttt tca 96
 40 Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
 41 20 25 30
 43 ttt cac aat gga ggt gta cag att tct tgt aaa tac cct gag act gtc 144
 44 Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
 45 35 40 45
 47 cag cag tta aaa atg cga ttg ttc aga gag aga gaa gtc ctc tgc gaa 192
 48 Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
 49 50 55 60
 51 ctc acc aag acc aag gga agc gga aat gcg gtg tcc atc aag aat cca 240
 52 Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
 53 65 70 75 80
 55 atg ctc tgt cta tat cat ctg tca aac aac agc gtc tct ttt ttc cta 288
 56 Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
 57 85 90 95
 59 aac aac cca gac agc tcc cag gga agc tat tac ttc tgc agc ctg tcc 336
 60 Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
 61 100 105 110
 63 att ttt gac cca cct cct ttt caa gaa agg aac ctt agt gga gga tat 384

RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/728,421C

TIME: 13:09:04

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

```

64 Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
65      115      120      125
67 ttg cat att tat gaa tcc cag ctc tgc tgc cag ctg aag ctc tgg cta      432
68 Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
69      130      135      140
71 ccc gta ggg tgt gca gct ttc gtt gtg gta ctc ctt ttt gga tgc ata      480
72 Pro Val Gly Cys Ala Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
73 145      150      155      160
75 ctt atc atc tgg ttt tca aaa aag aaa tac gga tcc agt gtg cat gac      528
76 Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
77      165      170      175
79 cct aat agt gaa tac atg ttc atg gcg gca gtc aac aca aac aaa aag      576
80 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
81      180      185      190
83 tct aga ctt gca ggt gtg acc tca      600
84 Ser Arg Leu Ala Gly Val Thr Ser
85      195      200
88 <210> SEQ ID NO: 2
89 <211> LENGTH: 200
90 <212> TYPE: PRT
91 <213> ORGANISM: Mus musculus
93 <400> SEQUENCE: 2
95 Met Lys Pro Tyr Phe Cys Arg Val Phe Val Phe Cys Phe Leu Ile Arg
96 1      5      10      15
99 Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
100      20      25      30
103 Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
104      35      40      45
107 Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
108      50      55      60
111 Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
112 65      70      75      80
115 Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
116      85      90      95
119 Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
120      100      105      110
123 Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
124      115      120      125
127 Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
128      130      135      140
131 Pro Val Gly Cys Ala Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
132 145      150      155      160
135 Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
136      165      170      175
139 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
140      180      185      190
143 Ser Arg Leu Ala Gly Val Thr Ser
144      195      200
147 <210> SEQ ID NO: 3

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RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/728,421C

TIME: 13:09:04

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

```

148 <211> LENGTH: 200
149 <212> TYPE: PRT
150 <213> ORGANISM: Mus musculus
152 <400> SEQUENCE: 3
154 Met Lys Pro Tyr Phe Cys Arg Val Phe Val Phe Cys Phe Leu Ile Arg
155 1 5 10 15
157 Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
158 20 25 30
160 Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
161 35 40 45
163 Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
164 50 55 60
166 Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
167 65 70 75 80
169 Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
170 85 90 95
172 Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
173 100 105 110
175 Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
176 115 120 125
178 Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
179 130 135 140
181 Pro Val Gly Cys Ala Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
182 145 150 155 160
184 Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
185 165 170 175
187 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
188 180 185 190
190 Ser Arg Leu Ala Gly Val Thr Ser
191 195 200
193 <210> SEQ ID NO: 4
194 <211> LENGTH: 218
195 <212> TYPE: PRT
196 <213> ORGANISM: Mus musculus
198 <400> SEQUENCE: 4
200 Met Thr Leu Arg Leu Leu Phe Leu Ala Leu Asn Phe Phe Ser Val Gln
201 1 5 10 15
203 Val Thr Glu Asn Lys Ile Leu Val Lys Gln Ser Pro Leu Leu Val Val
204 20 25 30
206 Asp Ser Asn Glu Val Ser Leu Ser Cys Arg Tyr Ser Tyr Asn Leu Leu
207 35 40 45
209 Ala Lys Glu Phe Arg Ala Ser Leu Tyr Lys Gly Val Asn Ser Asp Val
210 50 55 60
212 Glu Val Cys Val Gly Asn Gly Asn Phe Thr Tyr Gln Pro Gln Phe Arg
213 65 70 75 80
215 Ser Asn Ala Glu Phe Asn Cys Asp Gly Asp Phe Asp Asn Glu Thr Val
216 85 90 95
218 Thr Phe Arg Leu Trp Asn Leu His Val Asn His Thr Asp Ile Tyr Phe
219 100 105 110

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RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/728,421C

TIME: 13:09:04

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

```

221 Cys Lys Ile Glu Phe Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Arg
222      115      120      125
224 Ser Asn Gly Thr Ile Ile His Ile Lys Glu Lys His Leu Cys His Thr
225      130      135      140
227 Gln Ser Ser Pro Lys Leu Phe Trp Ala Leu Val Val Val Ala Gly Val
228 145      150      155      160
230 Leu Phe Cys Tyr Gly Leu Leu Val Thr Val Ala Leu Cys Val Ile Trp
231      165      170      175
233 Thr Asn Ser Arg Arg Asn Arg Leu Leu Gln Val Thr Thr Met Asn Met
234      180      185      190
236 Thr Pro Arg Arg Pro Gly Leu Thr Arg Lys Pro Tyr Gln Pro Tyr Ala
237      195      200      205
239 Pro Ala Arg Asp Phe Ala Ala Tyr Arg Pro
240      210      215
242 <210> SEQ ID NO: 5
243 <211> LENGTH: 234
244 <212> TYPE: PRT
245 <213> ORGANISM: Artificial Sequence
247 <220> FEATURE:
248 <221> NAME/KEY: misc_feature
249 <222> LOCATION: (1)..(234)
250 <223> OTHER INFORMATION: Xaa is an unspecified amino acid
253 <400> SEQUENCE: 5
W--> 255 Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg
256 1      5      10      15
W--> 258 Leu Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
259      20      25      30
W--> 261 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
262      35      40      45
W--> 264 Val Xaa Xaa Ser Cys Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
265      50      55      60
W--> 267 Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val Xaa Xaa Cys Xaa
268 65      70      75      80
W--> 270 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
271      85      90      95
W--> 273 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Asn Xaa Xaa Val Xaa Phe Xaa Leu
274      100     105     110
W--> 276 Xaa Asn Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Phe Cys Xaa Xaa Xaa
277      115     120     125
W--> 279 Xaa Xaa Xaa Pro Pro Pro Xaa Xaa Xaa Xaa Xaa Xaa Ser Xaa Gly Xaa
280      130     135     140
W--> 282 Xaa Xaa His Ile Xaa Glu Xaa Xaa Leu Cys Xaa Xaa Xaa Xaa Xaa Xaa
283 145     150     155     160
W--> 285 Lys Leu Xaa Trp Xaa Leu Xaa Val Xaa Xaa Xaa Xaa Xaa Phe Xaa Xaa
286      165     170     175
W--> 288 Xaa Xaa Leu Leu Xaa Xaa Xaa Xaa Leu Xaa Xaa Ile Trp Xaa Xaa Xaa
289      180     185     190
W--> 291 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa
292      195     200     205

```

See item #11 on
 ERROR SUMMARY SHEET
 See also, page 7 for more
 sequence numbers
 with this problem.

RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/728,421C

TIME: 13:09:04

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

```

W--> 294 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg
      295      210      215      220
W--> 297 Xaa Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      298 225      230
300 <210> SEQ ID NO: 6
301 <211> LENGTH: 966
302 <212> TYPE: DNA
303 <213> ORGANISM: Mus musculus
305 <220> FEATURE:
306 <221> NAME/KEY: CDS
307 <222> LOCATION: (1)..(966)
309 <400> SEQUENCE: 6
310 atg cag cta aag tgt ccc tgt ttt gtg tcc ttg gga acc agg cag cct      48
311 Met Gln Leu Lys Cys Pro Cys Phe Val Ser Leu Gly Thr Arg Gln Pro
312 1      5      10      15
314 gtt tgg aag aag ctc cat gtt tct agc ggg ttc ttt tct ggt ctt ggt      96
315 Val Trp Lys Lys Leu His Val Ser Ser Gly Phe Phe Ser Gly Leu Gly
316      20      25      30
318 ctg ttc ttg ctg ctg ttg agc agc ctc tgt gct gcc tct gca gag act      144
319 Leu Phe Leu Leu Leu Leu Ser Ser Leu Cys Ala Ala Ser Ala Glu Thr
320      35      40      45
322 gaa gtc ggt gca atg gtg ggc agc aat gtg gtg ctc agc tgc att gac      192
323 Glu Val Gly Ala Met Val Gly Ser Asn Val Val Leu Ser Cys Ile Asp
324      50      55      60
326 ccc cac aga cgc cat ttc aac ttg agt ggt ctg tat gtc tat tgg caa      240
327 Pro His Arg Arg His Phe Asn Leu Ser Gly Leu Tyr Val Tyr Trp Gln
328 65      70      75      80
330 atc gaa aac cca gaa gtt tcg gtg act tac tac ctg cct tac aag tct      288
331 Ile Glu Asn Pro Glu Val Ser Val Thr Tyr Tyr Leu Pro Tyr Lys Ser
332      85      90      95
334 cca ggg atc aat gtg gac agt tcc tac aag aac agg ggc cat ctg tcc      336
335 Pro Gly Ile Asn Val Asp Ser Ser Tyr Lys Asn Arg Gly His Leu Ser
336      100      105      110
338 ctg gac tcc atg aag cag ggt aac ttc tct ctg tac ctg aag aat gtc      384
339 Leu Asp Ser Met Lys Gln Gly Asn Phe Ser Leu Tyr Leu Lys Asn Val
340      115      120      125
342 acc cct cag gat acc cag gag ttc aca tgc cgg gta ttt atg aat aca      432
343 Thr Pro Gln Asp Thr Gln Glu Phe Thr Cys Arg Val Phe Met Asn Thr
344      130      135      140
346 gcc aca gag tta gtc aag atc ttg gaa gag gtg gtc agg ctg cgt gtg      480
347 Ala Thr Glu Leu Val Lys Ile Leu Glu Glu Val Val Arg Leu Arg Val
348 145      150      155      160
350 gca gca aac ttc agt aca cct gtc atc agc acc tct gat agc tcc aac      528
351 Ala Ala Asn Phe Ser Thr Pro Val Ile Ser Thr Ser Asp Ser Ser Asn
352      165      170      175
354 ccg ggc cag gaa cgt acc tac acc tgc atg tcc aag aat ggc tac cca      576
355 Pro Gly Gln Glu Arg Thr Tyr Thr Cys Met Ser Lys Asn Gly Tyr Pro
356      180      185      190
358 gag ccc aac ctg tat tgg atc aac aca acg gac aat agc cta ata gac      624

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/03/2002
 PATENT APPLICATION: US/09/728,421C TIME: 13:09:05

Input Set : A:\A-579D.ST25.txt
 Output Set: N:\CRF3\06032002\I728421C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 2,3,4,5,6,7,8,9,10,11,12,13,14,15,19,20,21,22,23,24,25,26
 Seq#:5; Xaa Pos. 27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45
 Seq#:5; Xaa Pos. 46,47,48,50,51,54,56,57,58,59,60,61,62,63,64,65,66,67,69
 Seq#:5; Xaa Pos. 70,71,72,73,74,75,77,78,80,81,82,83,84,85,86,87,88,89,90
 Seq#:5; Xaa Pos. 91,92,93,94,95,96,97,98,100,101,102,103,104,106,107,109
 Seq#:5; Xaa Pos. 111,113,115,116,117,118,119,120,121,122,126,127,128,129
 Seq#:5; Xaa Pos. 130,131,135,136,137,138,139,140,142,144,145,146,149,151
 Seq#:5; Xaa Pos. 152,155,156,157,158,159,160,163,165,167,169,170,171,172
 Seq#:5; Xaa Pos. 173,175,176,177,178,181,182,183,184,186,187,190,191,192
 Seq#:5; Xaa Pos. 193,194,195,196,197,198,199,200,201,202,203,204,205,206
 Seq#:5; Xaa Pos. 208,209,210,211,212,213,214,215,216,217,218,219,220,221
 Seq#:5; Xaa Pos. 222,223,225,226,228,229,230,231,232,233,234
 Seq#:10; Xaa Pos. 2,3,4,6,8,9,10,12,13,14,15,17,18,19,20,22,23,24,25,26,27
 Seq#:10; Xaa Pos. 28,29,30,32,35,38,39,40,42,43,44,45,46,47,48,49,50,51,52
 Seq#:10; Xaa Pos. 53,54,56,57,58,60,62,64,65,66,67,68,69,71,72,73,75,76,77
 Seq#:10; Xaa Pos. 78,82,83,84,85,86,88,89,90,91,92,94,95,96,97,98,99,100
 Seq#:10; Xaa Pos. 101,103,104,105,110,111,112,113,115,116,117,118,119,120
 Seq#:10; Xaa Pos. 121,122,125,126,127,128,129,130,131,132,134,135,136,137
 Seq#:10; Xaa Pos. 138,140,142,143,144,145,146,147,148,149,150,151,152,153
 Seq#:10; Xaa Pos. 154,155,156,158,160,161,162,164,169,171,172,174,175,176
 Seq#:10; Xaa Pos. 177,178,179,180,181,183,184,187,188,189,190,192,194,196
 Seq#:10; Xaa Pos. 197,198,200,201,203,204,205,206,207,208,210,212,213,214
 Seq#:10; Xaa Pos. 215,216,217,218,219,220,221,222,223,224,225,226,227,228
 Seq#:10; Xaa Pos. 229,230,231,232,233,234,235,236,238,239,240,241,242,243
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 Seq#:10; Xaa Pos. 274,275,276,277,278,279,280,281,283,285,287,288,289,290
 Seq#:10; Xaa Pos. 291,292,293,294,295,296,297,298,300,301,302,303,304,305
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 Seq#:10; Xaa Pos. 327
 Seq#:15; Xaa Pos. 2,5,11,13,17,18,20,21,22,23,25,27,28,29,35,36,37,38,39,40
 Seq#:15; Xaa Pos. 41,45,46,48,49,51,52,53,58,60,63,64,65,67,68,69,71,72,74
 Seq#:15; Xaa Pos. 78,80,87,89,91,93,95,96,97,98,99,100,101,102,103,104,105
 Seq#:15; Xaa Pos. 107,108,109,111,113,120,123,125,126,127,129,130,131,132
 Seq#:15; Xaa Pos. 133,135,137,140,142,147,150,155,161,163,168,171,174,175
 Seq#:15; Xaa Pos. 181,183,186,187,188,190,191,192,193,194,195,198,202,204
 Seq#:15; Xaa Pos. 207,209,210,213,214,215,216,217,219,220,222,223,224,225
 Seq#:15; Xaa Pos. 226,227,228,229,230,231,233,234,235,236,237,238,239,244
 Seq#:15; Xaa Pos. 245,246,247,248,250,251,252,254,255,256,257,259,261,262
 Seq#:15; Xaa Pos. 263,264,267,269,270,271,272,273,274,275,276,277,278,279
 Seq#:15; Xaa Pos. 280
 Seq#:20; Xaa Pos. 2,4,5,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24
 Seq#:20; Xaa Pos. 25,26,27,28,29,32,35,38,42,44,45,46,48,51,57,59,63,64,66
 Seq#:20; Xaa Pos. 67,68,69,71,73,74,75,81,82,83,84,85,86,87,91,92,94,95,97

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/728,421C

DATE: 06/03/2002
TIME: 13:09:05

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

Seq#:20; Xaa Pos. 98,99,104,106,109,110,111,113,114,115,117,118,120,124,126
Seq#:20; Xaa Pos. 133,135,137,139,141,142,143,144,145,146,147,148,149,150
Seq#:20; Xaa Pos. 151,153,154,155,157,159,166,169,171,172,173,175,176,177
Seq#:20; Xaa Pos. 178,179,181,183,186,188,193,196,201,207,209,214,217,220
Seq#:20; Xaa Pos. 221,227,229,232,233,234,236,237,238,239,240,241,244,248
Seq#:20; Xaa Pos. 250,253,255,256,259,260,261,262,263,265,266,267,269,270
Seq#:20; Xaa Pos. 271,272,273,274,275,276,277,278,280,281,282,283,284,285
Seq#:20; Xaa Pos. 286,291,292,293,294,295,297,298,299,301,302,303,304,306
Seq#:20; Xaa Pos. 308,309,310,311,314,316,317,318,320,321,323,324,327,329

Use of <220> Feature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Seq#:25,26,27,28,29,30,31,32,33,34,35

VERIFICATION SUMMARY

DATE: 06/03/2002

PATENT APPLICATION: US/09/728,421C

TIME: 13:09:05

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0

L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16

L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:32

L:264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:48

L:267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:64

L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:80

L:273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:96

L:276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:112

L:279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:128

L:282 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:144

L:285 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:160

L:288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:176

L:291 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:192

L:294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:208

L:297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:224

L:636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0

L:639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:16

L:642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:32

L:645 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:48

L:648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:64

L:651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:80

L:654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:96

L:657 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:112

L:660 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:128

L:663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:144

L:666 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:160

L:669 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:176

L:672 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:192

L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:208

L:678 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:224

L:681 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:240

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L:687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:272

L:690 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:288

L:693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:304

L:696 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:320

L:993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0

L:996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16

L:999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:32

L:1002 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:48

L:1005 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:64

L:1008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:80

L:1011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:96

L:1014 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:112

L:1017 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:128

L:1020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:144

L:1023 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:160

VERIFICATION SUMMARY

DATE: 06/03/2002

PATENT APPLICATION: US/09/728,421C

TIME: 13:09:05

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

L:1026 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:176
L:1029 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:192
L:1032 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:208
L:1698 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1698 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1707 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1707 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1716 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1716 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1725 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1725 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1734 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1734 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
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L:1743 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1752 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1752 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1761 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1761 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1770 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1770 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1779 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1779 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1788 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1788 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

STATISTICS SUMMARY

PATENT APPLICATION: US/09/728,421C

DATE: 06/03/2002

TIME: 13:09:05

Input Set : A:\A-579D.ST25.txt

Output Set: N:\CRF3\06032002\I728421C.raw

Application Serial Number: US/09/728,421C

Alpha or Numeric: Numeric

Application Class:

Application File Date: 05-17-2002

Art Unit: OIPE

Software Application: PatentIN3.0

Total Number of Sequences: 35

Total Nucleotides: 5350

Total Amino Acids: 5093

Number of Errors: 0

Number of Warnings: 97

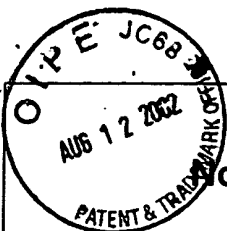
Number of Corrections: 1

MESSAGE SUMMARY

258 W: 22 (Mandatory Feature missing)

271 C: 1 (Current Filing Date differs)

341 W: 75 ((46) "n" or "Xaa" used)



Notice to Comply

Application N .

09/728,421

Examiner

Jessica H. Roark

Applicant(s)

YOSHINAGA, STEVEN K.

Art Unit

1644

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (Jun 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other:

Applicant Must Provide:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

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